Multiplicative Identity and Multiplicative Inverse

Name _____

Date _____ Period _____

Multiplicative Identity Property

The product of any number and 1 is equal to that number.

$1 \cdot a = a$ and $a \cdot 1 = a$

Examples:

Multiplicative Inverse Property

For any number, a, not equal to zero, there is a multiplicative inverse $\frac{1}{a}$ such that...

$a \cdot \frac{1}{a} = 1$

Examples:

Find the multiplicative inverse of the following numbers.

12 -3 8 x

The multiplicative inverse (reciprocal) of a fraction $\frac{a}{b}$ is $\frac{b}{a}$.

To create the reciprocal of a fraction, switch the numerator and denominator.

$\frac{5}{12}$ $\frac{4}{9}$ $\frac{1}{5}$ $\frac{3}{x}$

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